

PHASING DIAGRAM DETECTION LEGEND

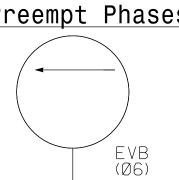
DETECTED MOVEMENT

UNSIGNALIZED MOVEMENT

PEDESTRIAN MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

EV Preempt Phases



•	
SEE NOTE #7	

TABLE OF	0PI	ERA	TI0	N			
	PHASE						
SIGNAL FACE	Ø2+6	Ø 8	EVB	FLAST			
21,22	G	R	R	Υ			
61,62	G	R	G	Y			
81		₹		≺R			
				-			

82,83 R G R R

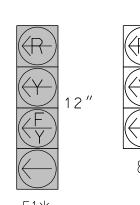
	LO	OP &	DETE	C	TC	R U	NIT :	INSTA	LL	AT	Ί(N	Cł	AF	RT	
								DET	EC1	OR	PR	OGF	(MA	/IN	G	
INDUCTIVE LOOPS						TIAA	ATTRIBUTES									
							TIMING			2 Z	3	4	5	6	7	<u> </u>
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	NEMA PHASE	DELAY	CARRY (STRETCH)	FULL TIME DELAY	PEDESTRIAN CALL	RESERVED	COUNT	EXTENSION	TYPE 3	CALLING	
2A	6×6	*	70	-	*	2	- SEC.	- SEC.	-	_	_	_	X	-	Χ	-
6 A	6×6	*	70	_	*	6	- SEC.	- SEC.	_	-	-	-	X	-	Χ	-
8.8	6×40	*	0	_	*	8	5 SEC.	- SEC.	_	_	-	-	X	-	Χ	-
8B	6×40	*	0	-	*	8	10 SEC.	- SEC.	-	-	-	-	X	-	Χ	-

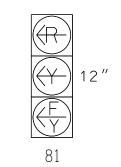
2033 SOFTWARE w/ 2070 CONTROLLER

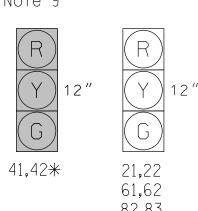
* Video Detection Zone

SIGNAL FACE I.D.

All Heads L.E.D. * See Note 9







	Y	1	2
	G		
(21,22 61,62 82,83		

35 Mph ___+1% Grade NC 55 (S. Alston Ave.) 81 82 83 21 ← ♦ $(2A) \bigcirc \longrightarrow$ 35 Mph -2% Grade NC 55 (S. Alston Ave.)

2 Phase Fully Actuated w/ EV Preemption (Durham Signal System)

PROJECT REFERENCE NO.

U-3308

Sig. 7.0

NOTES

- 1. Refer to "Road Standard Drawings NCDOT" dated January 2012, "Standard Specifications for Roads and Structures" dated January 2012.
- 2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer
- 3. Set all detector units to presence mode.
- 4. Program all timing information into phase banks 1,2, and 3 unless otherwise noted.
- 5. Set phase bank 3 maximum limit to 250 seconds for phases used.
- 6. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- 7. Upon completion of Emergency Vehicle Preemption, controller returns to normal operation.
- 8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 9. Bag and disconnect signal heads #41, #42, and #51 during this phase of construction.
- 10. Contractor shall adjust video detection zones as required.

PROPOSED EXISTING Traffic Signal Head \bigcirc Modified Signal Head N/A Sign Pedestrian Signal Head With Push Button & Sign Signal Pole with Guy Signal Pole with Sidewalk Guy Inductive Loop Detector Controller & Cabinet Junction Box 2-in Underground Conduit -----N/A Right of Way Directional Arrow "No Left Turn" (R3-2) "No Right Turn" (R3-1) $^{\otimes}$ \bigcirc Optical Detector Work Area N/A Drums N/A ---- E---- Construction Easement N/A

--- PUE --- Permanent Utility Easement

Barricades

Direct Bury

Video Detector

Video Detection Area

LEGEND

Signal Upgrade - Temporary Design 2 (TMP Phase 1, Steps 1-10)



NC 55 (South Alston Avenue)

NC 147 NB Ramp / Gann Street Division 5 Durham County PLAN DATE: September 2014 | REVIEWED BY: J Hochanadel

INIT. DATE

SEAL DATE

10 **SEC**. 7 **SEC**. O SEC. MINIMUM INITIAL * 1 () **SEC**. 3.0 **SEC**. 3.0 **SEC**. 2.0 **SEC**. **VEHICLE EXTENSION *** 4.0 **SEC**. 3.8 **SEC**. 3.0 **SEC**. 3.0 **SEC**. YELLOW CHANGE INT. RED CLEARANCE 1.6 SEC. | 1.6 SEC. | 1.4 SEC. MAXIMUM LIMIT * 50 **SEC**. 50 **SEC**. 35 **SEC**. VEH. RECALL VEH. RECALL **RECALL POSITION** VEHICLE CALL MEMORY YELLOW LOCK YELLOW LOCK DOUBLE ENTRY SEC. SEC. SEC. FLASHING DON'T WALK — SEC. SEC. SEC. MIN PED CLEARANCE SEC. SEC. SEC. TYPE 3 LIMIT SEC. SEC. SEC. ALTERNATE EXTENSION SEC. — SEC. — SEC. ADD PER VEHICLE * — SEC. — SEC. — SEC.

SEC.

3 . 0 **SEC**.

SEC.

2033 EV PREEMPTION

FUNCTION

MIN. PED. CLEAR BEFORE PREEMPT

** Program Timing on Optical Detector Unit

TIMING CHART

2033 SOFTWARE w/2070 CONTROLLER

Ø6

MIN. GREEN BEFORE PREEMPT

DELAY BEFORE PREEMPT

CLEARANCE TIME

PHASE

MAXIMUM INITIAL *

REDUCE 0.1 SEC EVERY

MAXIMUM GAP*

MINIMUM GAP

PREEMPT EXTEND**

EVB

(SECONDS)

0

2.0

0L2

These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

— SEC.

3 **.** 0 **SEC**.

3.0 SEC. | 3.0 SEC. | 2.0 SEC.

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SEC.

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2 . O **SEC**.

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MyPAL SIG. INVENTORY NO. 05-0284T2

N/A

N/A
